

Appl. No. 09/730,547

REMARKS/ARGUMENTS

In the Office Action, an objection was made to the Abstract as being longer than the recommended 50 to 150 words in length. It is noted that the Abstract was amended in the previous communication filed on January 5, 2005, and now has a length of 142 words.

The objection to the disclosure as containing an embedded hyperlink is also without basis, since the specification was amended in the communication filed on January 5, 2005 to remove the hyperlinks from page 7.

Withdrawal of the objections to the specification therefore is requested.

Claims 8, 9, 28, and 29 stand rejected under 35 U.S.C. 112, second paragraph. The references to X.500 is considered by the Examiner to vague and indefinite.

With respect, it is submitted that any person skilled in the art to which the present application pertains would readily understand the meaning of these references to X.500. Such a person would be intimately familiar with the maintenance of published certificate repositories and with the X.500 series of recommendations. These references therefore particularly point out and distinctly claim the subject matter of embodiments of the invention in a manner which would be clear to a person skilled in the art. Reconsideration and withdrawal of the rejection of these claims under 35 U.S.C. 112, second paragraph, are respectfully requested.

Regarding the rejection of claims 12, 31, 43, and 52, and in particular the language "from time to time", as being vague and indefinite, these claims have been amended to delete this language. It is believed that the amended claims fully comply with the second paragraph of 35 U.S.C. 112.

Turning now to the claim rejections under 35 U.S.C. 103, claims 1 to 7, 10, 11, 13 to 27, 30, 32 to 42, 44 to 51, and 53 to 55 were rejected as being unpatentable over United States Patent No. 6,725,240 (hereinafter Asad) in view of RFC-2632, "S/MIME Version 3 Certificate Handling" (hereinafter Ramsdell) and in view of "UniCERT | Policy Support: Operational Controls" (hereinafter UniCERT). As discussed in detail below, however, the cited references, whether taken alone or in combination, do not disclose the features defined in the rejected claims.

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As noted on page 4 of the Office Action, Asad teaches protecting against data tampering in an audit system. It is acknowledged in the Office Action that Asad does not disclose record to user mapping, user name to addressable entity mapping, or remote notification for each record. Notably, these features which Asad does not disclose constitute nearly the entirety of the independent claims.

With reference first to independent claim 1, for example, Asad does not disclose or suggest maintaining a record-user mapping which associates with each of a plurality of record identifiers a respective one or more user names. Asad also fails to disclose or suggest a user name-addressable entity mapping. Page 4 of the Office Action clearly acknowledges that these features are not disclosed in Asad. Since no record-user mapping and no user name-addressable entity mapping have been disclosed in Asad, the cited reference also does not disclose or suggest the obtaining steps defined in claim 1, namely obtaining a record's record identifier's respective one or more user names from the record-user mapping and, for each user name in the record's record identifier's respective one or more user names, obtaining from a user name-addressable entity mapping a respective addressable entity. The claimed operation of sending a notification of the record to the addressable entity is also absent from Asad, as acknowledged in the Office Action.

The Office Action then points to Ramsdell and its alleged teaching of a certificate database. It is not immediately apparent from the Office Action which of the claimed features Ramsdell supposedly discloses. It would appear as though Ramsdell is being relied upon as allegedly disclosing the claimed record-user mapping and user name-addressable entity mapping defined, for example, in independent claim 1. As discussed in detail below, however, Ramsdell does not disclose or suggest these features.

The paragraph bridging pages 4 and 5 of the Office Action notes that Ramsdell teaches a certificate database which, in its simplest form, would be local to a particular user and would function in a similar way as an "address book" that stores a user's frequent correspondents. According to Ramsdell, a certificate retrieval mechanism can then be limited to the certificates that a user has stored. The Office Action then refers to Section 4.4.3 of Ramsdell, which refers to the subject alternative name extension. This extension is used in S/MIME as the preferred

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means to convey RFC-822 e-mail address(es) that correspond to the entity for a certificate. It is important to note that this entity is not the user referred to in Ramsdell in the context of the certificate database. Ramsdell teaches that a user receives and stores certificates from incoming messages, and the subject alternative name extension may provide RFC-822 e-mail address(es) corresponding to the entity for that certificate, in this case the sending party. Therefore, it should be appreciated that the user and the entity are not the same.

On page 5 of the Office Action, reference is made to the suggestion on page 10 of Ramsdell that processing software should take immediate and noticeable steps to inform the end user if a certificate is not provably valid and associated with the message.

With reference again to claim 1, the claimed operation of maintaining a record-user mapping which associates with each of a plurality of record identifiers a respective one or more user names has not been disclosed or suggested in Ramsdell. The certificate database disclosed in Ramsdell is a database of certificates that have been received by a user from incoming messages and stored. No association between a user name and any type of record identifier has been proposed in Ramsdell. Thus, a record-user mapping is absent from Ramsdell.

The operation of obtaining a record's record identifier's respective one or more user names from a record-user mapping is also absent from Ramsdell, since no record-user mapping has been disclosed.

Although this is not specifically discussed in the Office Action, it appears as though the Examiner regards the RFC-822 e-mail address(es) of a subject alternative name extension as a user name-addressable entity mapping. As noted above, however, the user and a certificate entity in Ramsdell are different parties. Therefore, a subject alternative name extension in a certificate that is stored in a user's certificate database cannot reasonably be interpreted as a user name-addressable entity mapping.

Those familiar with S/MIME and certificate handling and processing would also readily appreciate that informing the user of a problem with a certificate, as proposed in Ramsdell, is not at all analogous to the notification operation as claimed.

When a user receives a message and an attached certificate, for example, the certificate is processed and a determination is made as to whether the certificate is actually valid and is

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associated with the message with which it was received. In the event that a certificate is not valid or is not associated with the message, an error or other indication is provided to the receiving user. This receiving user is not the entity for which the RFC-822 e-mail address(es) may be provided in a subject alternative name extension of a certificate. An RFC-822 e-mail address in a certificate is not in any way used to inform a receiving user about a problem encountered during certificate processing, and the entity corresponding to an RFC-822 e-mail address is not notified of any such problems.

It should be clear from the foregoing that Ramsdell does not cure any of the defects of Asad. The combination of Ramsdell and Asad does not disclose, suggest, or in any way render obvious at least the claimed record-user mapping, obtaining one or more user names from the record-user mapping, a user name-addressable entity mapping, obtaining a respective addressable entity for each user name, or sending a notification of a record to the addressable entity.

In the paragraph bridging pages 5 and 6 of the Office Action, reference is made to UniCERT as disclosing remote notification of a certificate event. However, UniCERT discloses only informing a subject that their certificate has expired and they should apply for a new certificate. There is no teaching or suggestion of at least the claimed record-user mapping, obtaining one or more user names from the record-user mapping, a user name-addressable entity mapping, or obtaining a respective addressable entity from the user name-addressable entity mapping.

Since none of the cited references teach or suggest at least these features, the combination of the cited references cannot possibly teach these features, all of which are defined in claim 1.

The above features have also been explicitly recited in independent claim 37.

Turning now to independent claim 20, it is alleged on page 7 of the Office Action that the combination of Asad in view of Ramsdell and UniCERT discloses the claimed limitations. Reference is made to Column 8, line 53 to Column 9, line 27 as allegedly disclosing the operation of identifying at least one record identifier for which target audit record processing is to be performed. With respect, it is noted that the referenced passage of Asad describes an audit record creation process, in which an audit client from which an event is received is notified of any of various failures during audit record creation. The referenced passage thus relates to audit record creation, not to record processing.

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In any case, Asad does not disclose target audit record processing as defined in claim 20. According to the claim, target audit record processing comprises, for each record identifier for which target record processing is to be performed, reading from an associated record the target user name which identifies a user name which was a target of an operation which resulted in the record, obtaining from a user name-addressable entity mapping a respective addressable entity for the target user name and sending a notification of the record to the addressable entity. Reference is made in the Office Action to Section 3 of Ramsdell as allegedly disclosing these features.

The referenced section of Ramsdell relates to using a distinguished name for an Internet mail address. Although an Internet mail address is disclosed by Ramsdell, the reference does not disclose reading a target user name from a record, obtaining from a user name-addressable entity mapping an addressable entity for the target user name, or sending a notification of a record to the addressable entity, as recited in claim 20.

It is not clear from the Office Action whether an Internet mail address as disclosed in Ramsdell is considered by the Examiner to be a user name or an addressable entity. In any case, Ramsdell does not disclose the target audit record processing as defined in claim 20. This processing involves the features of a user name-addressable entity mapping and sending a notification, which have been discussed in detail above with reference to claim 1.

Independent claim 46 recites at least the above features of independent claim 20 in apparatus form, and distinguishes over Asad and Ramsdell for the same reasons.

UniCERT fails to cure these defects in the combined disclosures of Asad and Ramsdell, as also discussed in detail above.

The remaining claims 2 to 19, 21 to 36, 38 to 45, and 47 to 55 depend from the independent claims, and distinguish over the cited references for at least the same reasons as the independent claims.

It is therefore respectfully submitted that all of the claims 1 to 55 are patentable over the cited references, and reconsideration and withdrawal of the claim rejections under 35 U.S.C. 103 are thus requested.

The Applicant looks forward to early and favourable consideration of the application, and to the issuance of a new Notice of Allowance. Should the Examiner consider there to be any

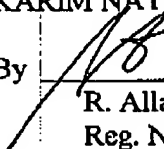
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remaining outstanding issues, the undersigned suggests that contact be made by telephone so that such issues can be most expeditiously resolved.

Respectfully submitted,

KARIM NATHOO, ET AL

By


R. Allan Brett
Reg. No. 40,476
Tel.: (613) 232-2486

Date: July 19, 2007

DMW/RAB/wfs